PLANT HAIRS AS BUILDING MATERIAL FOR POLISTES (HYMENOPTERA, VESPIDÆ)

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The various species of social wasps of the genus Polistes, like those of the genus Vespa, have long been known to use wood fiber as the material out of which to build their paper nests, and, so far as many people are aware, this is the only material used. Other kinds of plant fiber are used, however, the variety probably being much more extensive than might be supposed. The writer has seen Polistes gathering wood fiber from telephone poles and fence posts, cortical tissue and bast fibers from year-old dried stalks of *Fæniculum vulgare*, cortical tissue from the dried stalks of wild oats and other grasses, and the hairs forming the pubescence of *Lupinus albifrons*.

The last named plant, the white-fronted lupine, owes its specific name to the silvery white appearance produced by the dense appressed pubescence covering all parts of the plant except the flowers. On June 23 of this year a female *Polistes aurifer* Sauss. was seen to alight on one of these plants in a garden near Stanford University and begin scraping the hairs from the edge of a leaflet. It worked in the manner characteristic of the species, biting the material loose with its mandibles and walking slowly backward at the same time. After a few seconds the wasp moved to another leaf and scraped the hairs from the full length of the petiole. Again it moved and scraped the edge of a leaflet. Then it shaped its collection into a roundish mass and flew away. An examination of the lupine after the wasp had gone disclosed the fact that many of its leaves had been thus scraped for building material.

A MONOGRAPH OF OUR NABIDÆ

A most valuable contribution to a knowledge of our North American Hemiptera has just appeared as Nos. 1 and 2 of Vol. IX of Entomologica Americana. It is a monographic study of our North American Nabidæ by H. M. Harris of Ames, Iowa. It recognizes eight genera and forty-nine species, of which nine are described as new, and two or three new varieties are recognized.—E. P. Van Duzee.